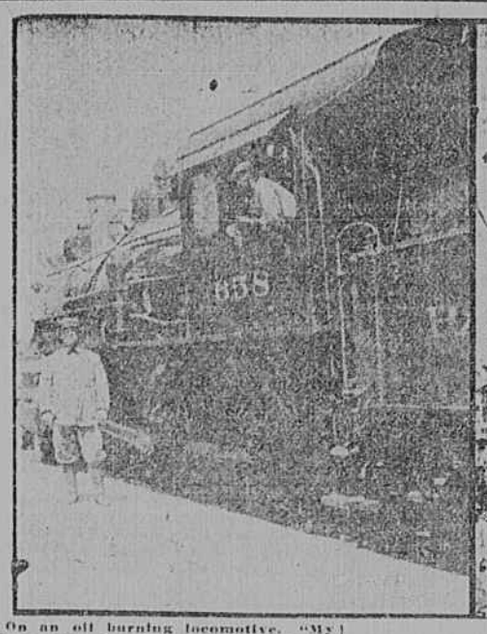
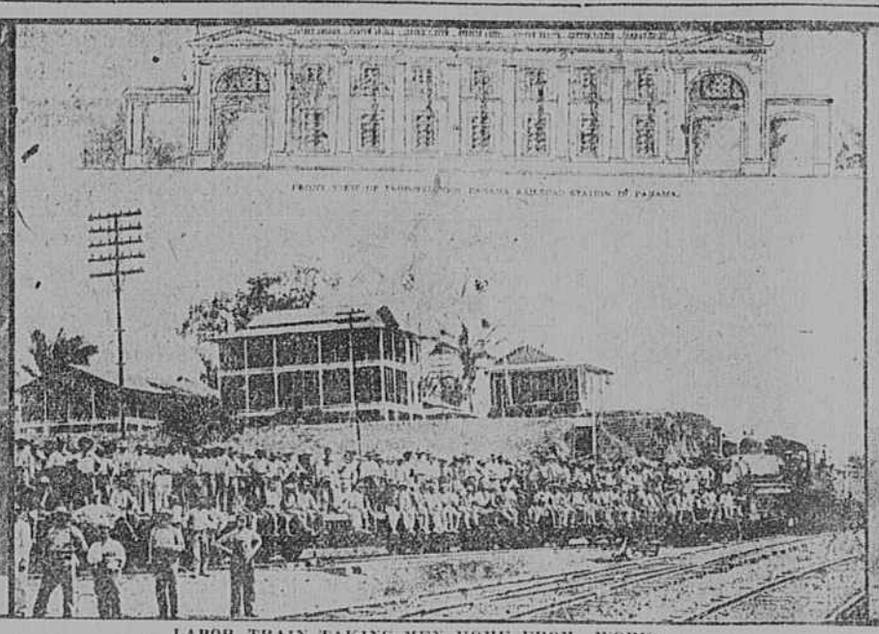
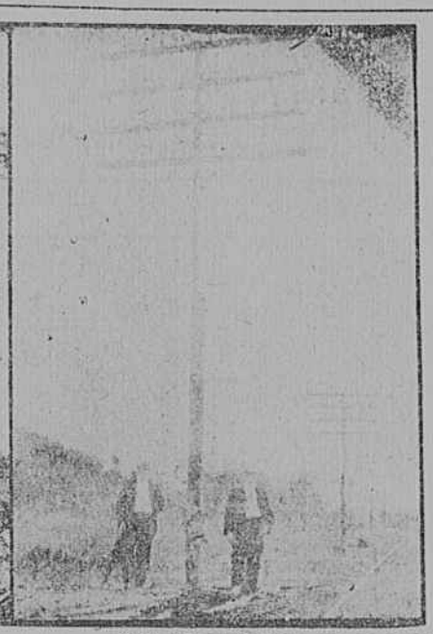
Railroad Fifty Miles Long but Its Assets Worth $25,000,000



On an oil burning locomotive. "My engine was No. 658, and its fuel was crude petroleum." Engineer Craig stands on the platform, with Peg Conners in the window above.



LABOR TRAIN TAKING MEN HOME FROM WORK.



"The telegraph poles are of steel." A. K. Stone, master of transportation, stands at the left.

Railway men with fat jobs. Engineers get $2,500 a year and conductors $215 per month.

BY FRANK G. CARPENTER.

Colon, Panama.

UNCLE SAM'S railway.

Yes, the title is right. Uncle Sam owns a railway, and it is one of the prettiest, busiest and best managed lines of the world. It has more traffic in proportion to its length than any road owned by any other government, and is paying better than any railway system of the United States. It is a beehive of industry which stores up honey of liquid gold. The line earned last year more than $1,700,000, which, according to the width of the territory it covers, was more than $34,000 a mile.

The main track of this road is less than fifty miles long. It begins here at Colon and runs across the Isthmus of Panama, skirting the canal, and ending at Balboa, our new port on the Pacific. A part of it is double-tracked, and it has switches and other construction at the terminals, which give it a total length of 198 miles, but even taking them into consideration, it is doing more business, I venture, than any other railroad under the sun. It took in last year more than $6,000,000, and its freight traffic amounted to more than 1,500,000 tons. It carried almost 2,500,000 passengers. And all this was outside the work done on the construction tracks of the Panama Canal.

The Panama Railroad is run as a commercial proposition, and Uncle Sam keeps his tracks in the Culebra Cut an elsewhere on a separate account sheet. He has hundreds of miles of other roads on the Canal Zone, but the Panama Railway proper is a government road, which charges fares to every one who goes over it and makes every ton of freight pay its tolls.

A Government Enterprise Which Pays.

But first let me tell you how the railroad is managed and something more of the enormous profits it makes. The president is Colonel George W. Goethals, the chief engineer of the canal, and the first vice-president is Mr. E. A. Drake, who has his headquarters in New York. Mr. Drake has been connected with the institution for many years and is one of its most valuable employes. In addition, we have Engineer Commissioner Hodges as the second vice-president and as the general superintendent and the man who has his hands on the wheels, and Mr. J. A. Smith, who has under him a full corps of engineers, mechanics and transportation officials, and the usual machinery which belongs to the management of any great railroad.

All of the officers are appointed by Uncle Sam, and with the exception of one or two shares, all the stock belongs to him. It came to the government through our purchase of the Panama Canal, being turned in by the French at a valuation of $7,000,000. The last French company had bought it of the De Lesseps organization for eighteen millions, but when we figured out the values of the Isthmian property it was put down at seven millions, and it has been carried on the books at that sum. Nevertheless, its assets have steadily grown, until they are now over $25,000,000, and the company to-day has a surplus of almost twelve millions. Moreover, the traffic and the profits are steadily increasing. The freight tonnage last year showed a gain of more than 22 per cent., and the number of passengers was 8 per cent. more than in 1910.

It Has Earned Millions.

The Panama Railroad has always been a paying institution. It began to yield dividends as soon as the first rails were laid, and for more than a generation it proved to be a gold mine to its owners. It was started by an American company at the time that the California gold excitement was at its height, and before the forty-seven miles which formed the first track was completed it had earned $2,000,000. Within four years after that its earnings were $32,000,000, which was four times what the road cost to construct, and it has kept on paying for itself again and again. It has always charged well for its services. Beginning with its opening in 1855, its freight rates were something like $160 per ton, or more than $3 per ton per mile, and passengers paid $25 for a single ticket which took them from one side of the Isthmus to the other. These rates prevailed for about thirty years.

Think of paying $25 for a fifty-mile journey! The rate was more than 50 cents a mile. At the same charge it would cost you $116 to go from New York to Boston, and the fare to Chicago would be $485. The cost across the Continent on the railroad would be $1,600, and at the present rate of fast travel it would cost something like $25 an hour to ride on the cars.

To-day the first-class rate on Uncle Sam's road is about 5 cents a mile, and second-class passengers pay 2 cents, while mileage books cost you 1-2 cent more per mile than in the United States. Notwithstanding all this, the Isthmus is hot and the walking is not over good, and so every one rides.

Across the Isthmus by Railroad.

We can buy first-class tickets from Colon to Panama for about two dollars and a half and we shall take a run over the road before we look into its management. We shall take the new line which is now being constructed to go around Gatun Lake high above the canal level. The old track ran through the bed of the lake, and it has long since been swallowed up by the waters held back by the dam. The new road is well built, being equipped with ninety-pound rails and for the most part with ties of pine and cypress soaked in creosote. The first road was built with ties of mahogany and lignum vitae, which are the only ties that will withstand the woodeating ants. There are some hardwood ties in the present road. That wood is so tough that the spikes cannot be driven without holes are first bored for them. They are put in with special boring machines, and patent tie plates and screw spikes are in use. The telegraph poles are of steel to withstand the white ants.

The cars are excellent. The first-class, where we ride, has rows of wicker seats on each side of the aisle that runs through the centre, and there is room for two passengers on each seat. We find the cars filled, and that with pay passengers.

Going on to the second class, we find them crowded with silver employes, mostly negroes. The seats here run under the windows, like those of a street car, and as a result about double the number are carried. The conductors are whites. A careful record is made of the tickets at both ends of the journey. There are gates through which you must go to enter the cars, and turnatiles through which you pass out when you leave the terminal station. The number of passengers is thus registered, and the officials know exactly how many people travel each day.

A Scenic Route.

But the train has left Colon and crossed over to the Mount Hope reservoir, which supplies that city with water. It goes by great warehouses holding supplies for the canal, and then begins the scenery which makes it one of the picturesque routes of the Continent. We pass a wide, grassy plain which was formerly infested with tapirs and deer, and thence rise into the hills of Gatun, where one can see the great locks on the right. The road now turns and cuts around Gatun Lake, which is in view for a great part of the journey. The roadbed has been built ten feet above the surface of the lake, and it is now on the ninety-five-foot level throughout the main part of the way. On the right we can see the great sheet of water, with its many islands, and in the future one will be able to look at the ships going through.

The vegetation on both sides of the road is tropical. There are palm trees and bamboos and fern trees as tall as a one-story cottage. Some of the trees have magnificent foliage, being covered with blossoms of the brightest of red, yellow and blue. Some of them are loaded with orchids, and others are bearded with Spanish moss. Part of the way is through a jungle like that of the Himalaya foothills above the plains of the Ganges, and in other places the country is open, and again we see hills and ridges not unlike those of the Blue Ridge.

Going on, we pass many little towns composed of mere shacks, and at Culebra and Empire find the great buildings of the canal and the homes of the employes. A little farther on we see Cucuracha and Pafaiso and then stop at Pedro Miguel, where there is a big engine yard and roundhouse. Here are the locks connecting the eighty-five-foot level with the Miraflores Lake, and the next stop beyond is at Miraflores itself, where the ships make their final descent to the Pacific sea-level. We then go on through the one tunnel of the line, and, leaving the canal route, cross level ground to Panama, the capital of the republic. There is a branch road running on to Balboa, but here the line practically ends, the two towns of Panama and Ancon being joined together almost in front of the station.

As we stop we look at our watches. We have been just about two hours crossing the Isthmus, and have come through on time, the rate of travel being about twenty-five miles per hour. There are three or four passenger trains each way daily, but more on Sunday, due to the fact that that is a holiday, when the canal employes ride back and forth visiting their friends.

A Train Every Four Minutes.

In a trip like this one sees something of the enormous traffic which is going on in the Isthmus. In addition to the Panama Railway proper, are the construction roads of the canal which are sending rivers of earth and rock out to the dumps on Lidgerwood cars. There are so many trains that the tracks actually seem to be moving. This is so both on the commercial road and on the excavation lines. Altogether, something like 5,000 cars are in use, and the engines number more than 400. There are twenty-seven trains which are always at work carrying out coarse rock from Culebra to Gatun, and there is a great number which are moving out toward Balboa.

Altogether, the average is 386 trains every day, which is equal to one train every four minutes, day and night, all the year through. These trains go all the time, with the exception of Sundays, and it seems to me that the commercial road is almost as busy at night as in the day time. It has a cold storage train at 4 o'clock in the morning and another train at 3. It has a regular work train at 5:30, starting out from Ancon, and another an hour later, which is filled with clerks, officials and tourists. Every one gets up early here, and girls who have never seen the sun rise are crawling out of their beds these hot mornings even before he comes up, in order that they may have a chance to see the canal.

At present, in addition to the regular traffic, we have what are called the rubber-neck trains. These are cars which have been put on to take visitors through the canal. They make special trips through the various divisions with a loud-mouthed conductor and the charge is a dollar a trip.

Handling the Traffic.

It is a big job to handle 386 trains a day on a fifty-mile line and its branches, and I am told that that job is better done here than it has ever been done elsewhere. The trains move like clockwork, and every engineer and every brakeman has to be Johnny-on-the-spot to catch the signals and not cause complications.

In the first place, the labor trains have to be on time to get the men to their work, and the scenes at the roundhouse when the engines start out are worth notice. There are 100 and more engines at Pedro Miguel, all of which leave at 6:30 A. M. Every engineer is ready before that time, and when the whistle blows the conductors and brakemen are all in their places. We have a record of dispatching 100 engines from that yard within five minutes, and the usual time required is only seven minutes. Some of thes engines go to Miraflores, some to the Culebra Cut and others to other places.

At the same time other engines are sent out from other yards and the whole system moves like one fine machine. In order to keep the engines in shape, they are gone over every night as soon as they come in from the work and are cleaned up and repaired before morning. Those which need it are sent to the repair shops, where the work is done chiefly by electric light, all the defects being remedied between 7 P. M. and 5 A. M.

In addition to the regular trains, there are wrecking trains, which keep up steam night and day. There are hospital cars, which are especially fitted with mattresses and berths for carrying the sick or those who meet with accidents, and there are coaling trains, which go through the canal when the work is not in progress and load the steam shovels and supply the blacksmith shops and other places where coal is needed.

The handling of the trains and the managing of the switches is a great work. The trains are moved by flags and signals, a green flag meaning south bound and a yellow one north bound. The semaphore is also employed, and when the steam shovels are working in the cut a negro stands at each switch and turns it as the yardmaster signals. Indeed, the system is such that accidents are comparatively few.

On an Oil-Burning Locomotive.

The machinery and equipment of these railroads are of the most modern description. The engines used in hauling out the earth and rock are the largest of their kind, and those of the Panama Railway proper are modern and first-class in every particular. As we came across the Isthmus on the road we were surprised to see that there was no dust nor cinders and very little smoke, and when we asked why we were told that the engines were oil-burning. During my stay here I have taken a ride on one of these oil locomotives, and after riding on it from Ancon to Culebra my face was as clean as when I left Panama.

My engine was No. 658, constructed by one of our American locomotive companies, and its only fuel was crude petroleum. The trip was arranged for me by Mr. A. K. Stone, the master of transportation of the Panama Railroad and brother of Warren S. Stone, the grand chief of the International Brotherhood of Locomotive Engineers. I was accompanied by Mr. James A. Craig, the senior traveling engineer of the commission, and the man who ran the locomotive was "Peg" Connors, one of the old standbys here and well known in the States. "Peg" told me that his engine weighed 224,000 pounds, and that it was carrying 200 pounds of steam pressure.

The only fuel was crude oil. Just back of the engine was an oil tank of 2,500 gallons, and this held sufficient for a run of 500 miles. The oil was let into the engine through pipes, and the fireman could increase or lower the temperature by turning a valve.

I looked into the furnace. A mighty flame filled the fire box, and I was told that the heat within was 2,200 degrees above zero. It made me feel as if there was only a sheet of brown paper between me and Hades. I then looked out of the window at the smokestack. There was practically nothing rising into the air, but a moment later, when the fireman threw a shovelfull of sand into the furnace, a great black cloud burst forth, and the soot flew out by the bushel. It is in this way that the smoke pipe is cleaned, the tremendous draft caused by the flame carrying the sand through and cutting the soot.

As I rode I could see the economy of using the oil. When we went down grade the oil was shut off and gravity did the work. The flow was also reduced at the stations, and fuel was only needed when the engine required it. Such a nengine costs about $26,000. It has what is known as the E. T. track equipment. The one on which I rode was built like a watch, and it ran as smoothly.

The Railroad Men of the Isthmus.

Mr. Smith, the general superintendent of the Panama Railway, tells me that Uncle Sam has down here at Panama the cream of the railroad engineers and conductors of the United States. We pay the highest salaries that are paid to railroad men anywhere in the world, and our men have the best treatment. We now have altogether 413 locomotive engineers on the Isthmus, and 150 of these are receiving more than $2,500 a year. We have other engineers, who are not qualified to run on the main line of the Panama road, who are receiving $190 a month.

The wages of our conductors range from $190 to $215 per month, and both engineers and conductors, like all the gold employes of the Isthmus, have forty-three days vacation with pay. They have also a sick leave for thirty days, making a total of seventy-two days in the year that a man may be out of his work and still receive pay.

As a result of these advantages, making the pay 40 or 50 per cent more than that in the States, the railroad company has no trouble in getting the best men. It has a long waiting list, and every railroad man who has come here and gone away wants to get back. At first such appointments were largely political, but the misfits have been discharged and weeded out, until the service is now the most efficient to be found anywhere.

I am told that many of these railroad men are saving money. They can lay away more out of their salaries than they could earn in the States, and, owing to the low prices of the commissary, they can live more cheaply here than at home. The most of such men are fine-looking physically, and I am told they are morally clean.

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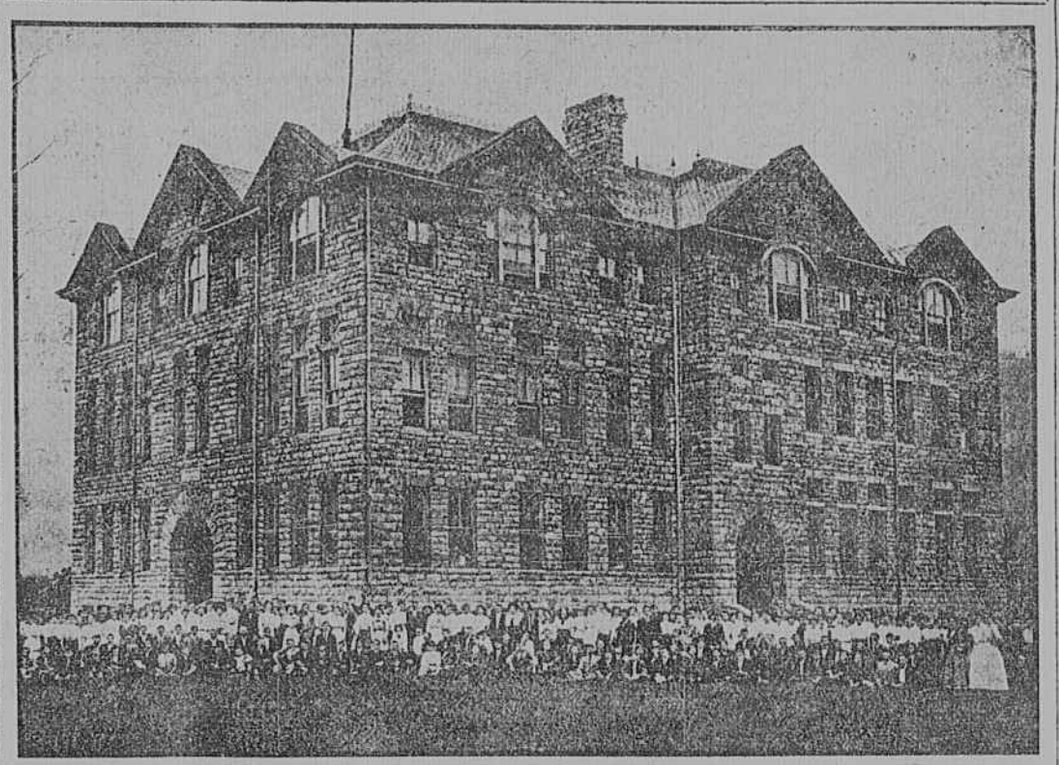
NORMAL SCHOOL CLOSES SUCCESSFUL SESSION



STUDENTS AND FACULTY OF THE SUMMER NORMAL SCHOOL AT BIG STONE GAP, VA.

[Special to The Times-Dispatch.]

Big Stone Gap, Va., August 3.—In 1907 the Big Stone Gap Summer Normal Institute was established in order that the teachers of Southwest Virginia might have the advantages of a summer normal course without the necessity of going a long distance from home. The attendance the first year was 313. In 1908, the attendance was 320; in 1909, 305; in 1910, 327; in 1911, 276, and this year the attendance was 368. The following counties of Southwest Virginia were represented this year, and the total enrollment from each county was as follows: Wise, 101; Scott, 87; Lee, 68; Russell, 24; Dickenson, 20; Buchanan, 4; Tazewell, 2; Letcher county, Ky., 2.

The normal this year, and for the last several years preceding, has been under the efficient management of J. N. Hillman, division superintendent of schools for Wise county. Mr. Hillman is one of the most progressive educators in Southwest Virginia, and under him the normal has grown in prominence, in efficiency, in usefulness, and nowhere in the State is more being done for the cause of education.

Thirty years ago Wise county was wholly undeveloped; there were no railroads, no schools, and the county was the poorest in the State. With the development of her coal properties, the opening up of her timber lands, the improvement of her farms, Wise county is now one of the richest counties in the State. No county has made greater strides in educational matters. At Big Stone Gap, Wise Courthouse, Coeburn, Appalachia, Norton and East Stone Gap there are splendid high school buildings, the value of which, including equipment, is $153,000, and the value of the smaller schools throughout the county is $44,000.

Mr. Hillman's progressive spirit is evidenced in the selection of his faculty, which has always been a strong one, and this year was particularly so. The following instructors composed the faculty: Miss Annabel Wood, critic teacher, Harrisonburg Normal, primary methods and reading; F. W. Taylor, principal Valley High School, Lomax, arithmetic and algebra; Miss Lavinia Critz, teacher of English, Roanoke High School, Roanoke, English grammar; R. M. Addington, principal Valley High School, Mace's Spring, United States history and general history; J. E. Carter, principal Dryden High School, Dryden, Virginia history; H. C. Williams, principal Honaker High School, Honaker, manual and physical geography; Miss Jessie P. Nidermaier, teacher Clintwood High School, Clintwood, physiology and hygiene; Miss Willie London, teacher Roanoke High School, Roanoke, English history and spelling; Arthur W. Stair, principal Jonesville High School, Jonesville, civil government and agriculture; Miss Martha W. Coulling, head department of drawing, State Female Normal School, Farmville, draying; Miss Virginia Caldwell, graduate Pratt Institute, Brooklyn, N. Y., domestic science; J. N. Hillman, division superintendent of schools for Wise county, theory and practice of teaching.

Although the normal is so young, it attempts in every way to give the students attending it the same advantages to be had at older and larger summer schools. Perhaps nowhere in the State is the necessity for instruction in domestic science, in household economics, in sanitation and improvement in living conditions so great as in the mountains of Southwest Virginia. The school is trying to meet this need by putting into the summer school a course in domestic science. For the last few years the instructor in domestic science has been a graduate of Pratt Institute, acknowledged by authorities to have one of the best schools of domestic science in this country, and great good has resulted from the work done in this department.

The personnel of the student body is very fine—the percentage of men and women attending is about equal, a most unusual fact, as in most summer normal schools the women are largely in the majority. The students come almost entirely from rural homes, and they come eager to learn and to make the most of the opportunity extended them. Many of them make great sacrifices to take this summer work, as in many cases they teach in small schools, with short sessions, and they are able to save very little above their expenses. Therefore, they come to work, and except when passing from the school to their boarding houses, they are rarely seen about the streets, and their conduct is always above reproach.

The management does much to bring to the pupils outside of schools hours inspiration and a broader outlook. At various times during the month many interesting talks and lectures were given. Dr. Douglass Freeman, of the State Health Department, addressed the students on school sanitation; Mrs. Dashiell, of Richmond, president of the Virginia Co-operative Educational Association, made an earnest appeal to the students on the importance of forming civic clubs in the communities in which they teach; Mrs. M. M. Caldwell, of Roanoke, president of the Virginia Federation of Women's Clubs, made a most instructive and interesting address to the pupils on civics; Mrs. Parrott, State secretary of the W. C. T. U., addressed the students on the teaching of temperance in the school room; Dr. J. P. McConnell, of Emory and Henry, lectured on industrial education. One of the most interesting of the many entertainments was a debate given by the students, in which a representative from each of the counties of Wise, Lee and Russell debated against a representative from each of the counties of Buchanan, Scott and Dickenson. The question debated was: "Resolved, That the world is growing better."

The affirmative, being the representatives of Wise, Lee and Russell, won the debate. An old-fashioned spelling match was also given by the pupils, in which the students from the counties of Wise, Lee and Russell spelt against the students from the counties of Buchanan, Scott and Dickenson. In this match the counties of Buchanan, Scott and Dickenson won.

The people of the town co-operate with the management of the school in the effort to make the sojourn of the pupils as pleasant as possible. An informal reception is always given on the evening of the opening day of the school. The students and faculty are welcomed to the town by its Mayor, its pastors, a representative of the school board, of the Civic League, of the Board of Trade, and other organizations of the town, after which the people of the town are introduced personally to the faculty and students.

This year the members of the Woman's Civic League gave a most delightful musical entertainment to the faculty and students of the schools, after which refreshments were served in the hall of the school.

The facilities offered the students for work in the summer normal school here are perhaps unequalled in the State. The high school building is a large, commodious, stone structure, with large, well-ventilated, well-lighted school rooms and splendid equipment. The school grounds cover four acres of land and are kept in most beautiful condition. There is a tennis court on the grounds, and during the school session a game of tennis was always in progress. On the third floor of the school building is a splendidly equipped gymnasium, which was kept open for the use of the summer students. The Big Stone Gap Athletic Association owns one of the most beautiful athletic fields in the State of Virginia. Games of baseball between the students of the normal school and the home team were frequently played, and the normal students were free to use the diamond for practice games. The gold course was also open to the summer students.

For climate, location and other advantages a more ideal location for a summer school than Big Stone Gap could not be found. The nights are always delightfully cool and never during the day is the weather oppressive, which contributes much to the ability of the students to do good work. The town is the natural centre of the extreme southwestern part of the State, and is easily accessible by railroads to the counties of Tazewell, Russell, Dickenson, Wise, Lee, Scott and Washington, from which counties the students come. The town is also the intellectual, education and social capital of the southwestern section of the State, the civic spirit is highly developed and the citizens co-operate with the faculty in the effort to do everything possible for the uplift and comfort and pleasure of the students while residing in the town. Prohibition prevails in the town and all the surrounding section and this makes the town very desirable as a location for a summer school.

During the session of the school the students are domiciled in the homes of the citizens of the town. Professor H. H. Young, principal of Big Stone Gap High School and local manager of the Normal School, had charge of this part of the work. He made a canvass of the town and secured for the pupils most comfortable quarters at reasonable prices. There have been no complaints by students or boarding-housekeepers, and the utmost harmony and satisfaction has prevailed.

The session of the summer school opened on July 2 and closed July 30, examinations being held on July 31 and August 1. Of the 368 pupils enrolled, 173 took the examinations, and 260 received certificates of attendance, which certificates were given in evidence of the fact that the pupils had been present each of the twenty days and had put in the equivalent of four periods, of forty minutes each, every day.